

Certificate of Analysis

Print Date: Jul 14th 2020

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Product Name: HU 210 Catalog No.: 0966 Batch No.: 12

CAS Number: 112830-95-2

IUPAC Name: (6aR)-trans-3-(1,1-Dimethylheptyl)-6a,7,10,10a-tetrahydro-1-hydroxy-6,6-dimethyl-6H-dibenzo[b,d]pyran-9-

methanol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{25}H_{38}O_3$ Batch Molecular Weight:386.57Physical Appearance:White solid

Solubility: ethanol to 100 mM

DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.3$ (Ethyl acetate:Petroleum ether [1:9])

Melting Point: Between 147 - 148°C
HPLC: Shows 99.1% purity

¹H NMR: Consistent with structure

Optical Rotation: $[\alpha]_D = -208$ (Concentration = 1, Solvent = Chloroform)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 77.68 9.91 Found 77.7 10.09

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Product Information

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methanol

Description:

Highly potent cannabinoid receptor agonist (K_i values are 0.061 and 0.52 nM at cloned human CB_1 and CB_2 receptors respectively). Induces spatial memory deficits and suppresses hippocampal firing rates in rats. Also displays agonist activity at GPR55 ($EC_{50} = 26$ nM).

Physical and Chemical Properties:

Batch Molecular Formula: C₂₅H₃₈O₃ Batch Molecular Weight: 386.57 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

ethanol to 100 mM DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Other Information:

INFORMATION FOR CUSTOMERS IN THE UK ONLY

This product is a Schedule 1 Home Office controlled substance and customers in the UK are required to hold the relevant licence or be exempt from restrictions in order to purchase and possess this material.

References:

Robinson *et al* (2007) The synthetic cannabinoid HU210 reduces spatial memory deficits and suppresses hippocampal firing rates in rats. Br.J.Pharmacol. *151* 688. PMID: 17502849.

Ryberg et al (2007) The orphan receptor GPR55 is a novel cannabinoid receptor. Br.J.Pharmacol. 152 1092. PMID: 17876302.

Howlett *et al* (1990) Stereochemical effects of 11-OH- Δ 8-tetrahydrocannabinol-dimethylheptyl to inhibit adenylate cyclase and bind to the cannabinoid receptor. Neuropharmacology **29** 161. PMID: 2158635.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use